

a first decimal digit of the personal identification number receives a value first decimal number  $d_1$  modulo 9; and

*Concluded  
B2*

$N-1$  further groups of a second predefinable number  $n_2$  of digits of the binary number are converted each time into  $N-1$  decimal numbers second decimal number  $d_2$  through  $N$ th decimal number  $d_N$ , the second predefinable number  $n_2$  being selected so as to yield a second natural number  $z_2$  such that a quotient  $2^{n_2}/(z_2*10)$  is close to 1, to satisfy a condition of  $0 \leq 2^{n_2} \bmod 10 < 3$ , and decimal digits 2 through  $N$  of the personal identification number receive values  $d_i$  modulo 10,  $i=2$  through  $N$ .

20. (Amended) The method of claim 18, wherein the first predefinable natural number  $n_1$  and the second predefinable number  $n_2 \leq 16$  are predefined.

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23. (Amended) The method of claim 18, wherein the binary number has a length  $L=3*n_3$ , third natural number  $n_3$  groups of three digits of the binary number are converted into third natural number  $n_3$  decimal digits to generate third natural number  $n_3$  digits of the personal identification number.

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26. (Amended) The method of claim 25, wherein a set of numbers 0 through 8191 is allocated to natural number  $n_5$  subsets  $M_1, \dots, M_{n_5}$ , and a preset value  $d_i$  is added to the resultant decimal number if it is an element of a set  $M_i$ , where  $999 < \text{first decimal number } d_1 < \text{second decimal number } d_2 < \dots < \text{third decimal number } d_{n_5} < 1809$ .

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28. (Amended) The method of claim 27, wherein a set of numbers 0 through 65535 is allocated to natural number  $n_5$  subsets  $M_1, \dots, M_{n_5}$ , and a preset value  $d_i$  is added to the resultant decimal number if it is an element of a set  $M_i$ , where  $9999 < \text{first decimal number } d_1 < \text{second decimal number } d_2 < \dots < \text{third decimal number } d_{n_5} < 34465$ .

29. (Amended) A method for generating a personal identification number (PIN) having a number of  $N$  decimal digits, to be used for money cards and other security-requiring devices, comprising:

generating the personal identification number from a binary number having  $L$  digits so that the personal identification number is randomly distributed over an available number

domain, wherein:

a first digit of the personal identification number is generated by:

generating a pseudo-random number composed of up to 36 hexadecimal digits from a binary number of a length L;

converting each hexadecimal digit of the pseudo-random number using one different one out of 36 possible different mathematical mappings of the 36 hexadecimal digits into digits 1 through 9, into another digit of the digits 1 through 9, forming a generated number;

linking up to 36 decimal digits of a generated number in a mathematical operating to form a decimal digit that is unequal to zero and that represents a first digit of the personal identification number, to average out a probability of a particular personal identification digit occurring; and

a second digit and each following digit of the personal identification number is generated by:

generating another pseudo-random number composed of up to 210 hexadecimal digits from the binary number of length L;

converting each hexadecimal digit of the another pseudo-random number into one decimal digit using each time one different one out of a 210 possible mathematical mappings of hexadecimal digits into decimal digits; and

linking up to 210 decimal digits of a generated number in a mathematical operation to form a decimal digit representing a particular digit of the personal identification number, to average out the probability of the particular personal identification digit occurring.

Please add without prejudice new claims 36 and 37, as follows:

36. (New) A method for generating a personal identification number (PIN) having a number of N decimal digits, to be used for money cards and other security-requiring devices, comprising:

generating the personal identification number from a binary number having L digits so